FRA Visiting Committee for the Fermi National Accelerator Laboratory Administration and Operations Support Review – 2010

August 2-4, 2010

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FRA VISITING COMMITTEE
FOR
FERMI NATIONAL ACCELERATOR LABORATORY
Batavia, Illinois

ADMINISTRATION AND OPERATIONS SUPPORT REVIEW

August 2-4, 2010

Team Members

K. Anne Street, Chair
Consultant

Jane L. Monhart
Consultant

Betsy O'Connor
Assistant Chief Financial Officer
Argonne National Laboratory

Frank Sanchez
Consultant

Jonathan C. Silverstein
Associate Director
Computation Institute
University of Chicago and Argonne National Laboratory

Robert B. Stuewe
Operating Experience Program Coordinator
Contractor Assurance Office
Los Alamos National Laboratory

Gregory Snow
Associate Dean for Research, College of Arts and Sciences
University of Nebraska

FRA Visiting Committee for Fermilab
Administration and Operations Support

July 15, 2010

Charge to the Committee

Fermi Research Alliance, LLC (FRA) has established an annual Visiting Committee consisting of a diverse group of experts for the purpose of performing a three-day peer review of the Fermi National Accelerator Laboratory's (Fermilab's) administration and operations support activities. Administration and Operations external reviews are conducted annually at Fermilab at the behest of the FRA Board of Directors in order to continually improve Laboratory operations, integrate best practices into the Laboratory management culture, and to apprise the FRA Board of Directors and FRA management of the status of administrative and operational support and related issues requiring further study and/or resolution.

The Visiting Committee is asked to review and evaluate the quality and effectiveness of Fermilab's administrative organizations and operations support systems, which specifically include: Quality and Best Practices; Environment, Safety & Health; IT; Facilities Engineering Services; Business Services; Workforce Development and Resources; and Finance. While the review team will have discretion to pursue questions of interest, the format for the review will consist of presentations by Fermilab offices/sections, and related follow-up, that specifically answer the following questions in no more than two slides per question:

1. How did your functional area fare last year versus established performance measures? What steps are being taken to address deficiencies or to sustain outstanding performance? What is your assessment of your progress to date against the FY10 performance measures and your projection of outcomes for the year against these measures?

2. What specific achievements has your unit made in developing and sustaining a service culture? Specifically:

    a. Has the reorganization and consolidation of IT support services had the desired effect?

    b. Has our ability to track and trend, especially in the ES&H area, improved?

    c. Do the compensation, employee relations and employment functions enable and support excellence in science?

    d. Are benefits planning and administration meeting employees' needs?

    e. Has the performance of organizations involved in utilizing the ARRA funding been up to the task?

    f. What improvements would you like to see?

3. As the activities funded by the ARRA wind down, is Fermilab, including its subcontractors, facing, either directly or indirectly, a situation where the workforce funded by the ARRA will be facing significant layoffs? If so, what is the plan to deal with the situation and what are our expectations for its success?

4. How is your unit integrating the efforts of Office of Quality and Best Practices (OQBP)? What contact has your area had with the OQBP? What do you plan for the future? How is your unit implementing appropriate aspects of the Quality and Best Practices plan? How does this support the requirement for a Contractor Assurance System?

5. What interaction did your unit have with counterpart operations staff at Argonne National Laboratory? What are your future plans for interaction, and what are your specific goals?

6. Last year our Days Away Restricted Transferred and Total Recordable Case rates were high; this year the same rates have been remarkably low. Which year, if any, reflects the true state of our safety program and why?

7. How are you addressing succession planning for your unit?

FRA tasks this Committee to assess the Laboratory's progress in these specific areas, to identify opportunities for improvement, and make recommendations to FRA, and in turn, to Laboratory management. These recommendations should be prepared informally in an oral closeout at the end of the peer review process and in a final written report to FRA no later than August 31, 2010.

BACKGROUND

Fermilab is located in Batavia, Illinois and is managed and operated by the Fermi Research Alliance, LLC under contract with the U.S. Department of Energy (DOE). The Laboratory's mission is to advance the understanding of the fundamental nature of matter and energy by providing leadership and resources for qualified researchers to conduct research at the frontiers of high-energy physics and related disciplines. The Laboratory's most noteworthy research facility is the Tevatron which continues to operate at the world's highest center-of-mass energy. The DOE plans to continue to operate the Tevatron for user research in FY 2011. The facility may continue to operate beyond that point depending on funding opportunities, the research activities of the Large Hadron Collider at CERN, and other factors.

FY 2010 Congressionally-appropriated funding for Fermilab is approximately $431.5M including $19.1M in FY2010 American Recovery and Reinvestment Act (ARRA) funding that is being used for investments in critical scientific infrastructure, research toward next generation particle accelerators, and continued development of a future neutrino experiment.
The Office of High Energy Physics (OHEP) in the DOE Office of Science (SC) is Fermilab's principal program and funding sponsor. DOE's Fermi Site Office (FSO) is co-located at the Laboratory and is assigned a set of contract administration responsibilities including important

performance assessment duties under the Department's Performance Evaluation and Measurement Plan (PEMP) for Fermilab.

The FRA Visiting Committee for Administration and Operations Support is an important element of FRA's corporate strategy to assess the Laboratory's performance in functional areas that are critical to the Laboratory's mission success. The Committee is composed of consultants who bring a broad range of functional expertise and experience in laboratory management from the public and private sectors.

Two developments were announced last year that had major impacts on the Laboratory's administrative and operations support structure during their implementation phase in FY 2010. First, The Laboratory addressed the reorganization of the information technology functions in which the MIS unit (formerly assigned to the Finance Section) was integrated into the Computing Division. This integration and centralization of IT resources and services has been a dramatic change for the Laboratory and not without significant issues in service. Secondly, the Laboratory has undertaken more than $100M in ARRA funding without and increase in staff. The FRA charge to the Committee recognizes these challenges and requests an assessment of how well the Laboratory is addressing them.

COMMITTEE MEMBERS

Team members include experts with functional and organizational expertise consistent with the FRA charge. The Committee includes experience from private industry, DOE's national laboratories, and the DOE in the fields of business management, human resources, ES&H, facilities management, quality assurance, information technology, finance and budget. The team also includes a member of the FRA Board of Directors, who has many years of experience at the Laboratory and with the scientific and user communities.

METHODOLOGY AND APPROACH

The review process included information gathering through a variety of processes: briefings, interviews, document reviews, and observations of on-site activities. Data collection methods were qualitative in nature, and specifically included:

- **Briefings** – The Visiting Committee was briefed by the Associate Laboratory Director, Chief Operating Officer, Chief Information Officer, and Section Heads, This process was interactive, included question-and-answer segments and included the answers to questions posed by the Committee prior to the Review.

- **Interviews** – More than thirty Fermilab staff members and DOE FSO personnel were interviewed during the course of the assessment. Interviewees included a diverse range of both operations and administrative support staff, as well as their customers (representatives of the mission-related organizations who use Section services).

- **Document Reviews –** The team reviewed key Laboratory documents particularly in the area of Quality and Best Practices.

The Committee was divided into seven segments for purposes of interviewing and report writing, based on team members' specific areas of expertise and experience, and each was assigned a major focus area: Facilities Engineering, ES&H, Finance, Workforce Development & Services, Business Services, Quality and Best Practices and Information Technology.

The results were divided into four categories:

- **Observations –** Significant items gleaned from the formal presentations and the interviews that we wish to acknowledge.

- **Noteworthy Practices –** Practices and procedures identified in one Section that either are significantly beneficial to the operation of the Laboratory or could be applied by other organizations to improve their performance.

- **Recommendations –** Areas identified by the Committee that have room for improvement and should be addressed by Section personnel and other Laboratory personnel where appropriate.

- **Findings –** Serious deficits in need of immediate action that have the potential for negative outcomes in performance. These are often issues that can only be dealt with by Laboratory senior management.

As shown in this report, these categories were not all applicable to every organization and every charge question.

OBSERVATIONS, NOTEWORTHY PRACTICES, RECOMMENDATIONS, AND FINDINGS

Following are the Committee's assessments of the Laboratory's performance at the Section/Division level.

Business Services Section (BSS)

The Committee interviewed the BSS Head as well as representatives from Procurement and Information Resources. Feedback was also obtained from customer representatives and the FSO. It is clear to the Committee that BSS is continuing to provide high quality service to the Laboratory, making good use of its resources, and continuing to look for ways to be more effective and efficient. BSS faced a particular challenge in managing ARRA-funded procurements and the Committee was very impressed with how successful BSS has been in meeting this challenge.

Observations

The Committee found that BSS met or exceeded its FY 2009 performance measures and is on track to meet or exceed its FY 2010 performance measures. BSS customers expressed high

satisfaction with overall BSS service and, where an issue was mentioned, it was usually something over which BSS had little or no control and the customer acknowledged this. It is evident that BSS continues to look for system improvements and ways in which to provide more effective and efficient services. An item high on its priority list from last year is the implementation of Oracle iProcurement. However, the new IT organization has not yet had its desired effect for BSS and, along with longer response times for other needed IT services, Oracle iProcurement has not been addressed and the timing on it is not known. BSS recognizes that the new IT organization is in its infancy and deserves patience from its customers. In the meantime, BSS plans to continue to pursue the prioritization of Oracle iProcurement but also will look at other potential alternatives, e.g. Supply Chain Management.

As noted above, ARRA funding was a particular challenge and this effort was concentrated in the Procurement Department. At the same time BSS experienced a record year in procurement dollar volume. Nevertheless, all work was accomplished with existing staff, systems, and procedures. Further, the ARRA work was subject to audits by the Internal Audit staff and the Inspector General and there were no findings. This is a significant achievement. However, it should be noted that the organization was clearly stressed with a level of effort that is not sustainable. There were items that took a lower priority and need to be addressed if the organization is to experience continued success, e.g. education and training, maintaining policies and procedures, attendance at Project Management Group meetings. Subcontract administration for ARRA construction projects will continue well into the next fiscal year, but it is hoped that BSS will begin to attend to these important items.

In addition to its successful management of ARRA procurements, BSS contributed to the Laboratory's OQBP efforts, contributed to the Laboratory's good ES&H record, continued its positive interactions with Argonne National Laboratory (ANL), pursued succession planning, and has other achievements to its credit. BSS's OQBP efforts included but were not limited to participation in the Assurance Council, substantial interaction with URS/EG&G staff, assistance with management systems identification for CAS, and training attendance. In the ES&H arena, BSS's accomplishments at the time of the Committee's review included but are not limited to:

- No DART cases for the 571 days prior to the Committee's review;
- A National Safety Council Perfect Safety Record award for Zero OSHA DART Cases for the twelve month period beginning January 2009;
- No Recordable Cases since January 6, 2009;
- National Safety Council awards to all BSS drivers in the Transportation Services Department for no motor vehicle accidents since 2007;
- Acquisition of 25 fuel efficient vehicles via ARRA to replace older vehicles at no additional cost to the Laboratory;
- EPEAT Certification for all BSS computer electronic acquisitions;
- Use of recyclable cafeteria cups;
- Recycling of approximately 5 cubic yards of cardboard from construction projects to reduce the amount of material to be disposed of as solid waste;
- Continuation of the Laboratory's award-winning electronic recycling program; and
- Exceeding targets for alternate fuel use and petroleum reduction.

BSS's interactions with ANL had an especially positive result when ANL procurement and shipping advice resulted in over $800,000 of cost savings for duty-free entry for wavelength-shifting optical fiber. Other positive efforts included: 1) jointly organizing a DOE Contractor Travel Managers' Meeting, 2) ongoing lunch meetings with Records Management staff, and 3) recycling 21,500 pounds of electronics and 38,000 pounds of monitors from ANL.

In the area of succession planning, BSS is continuing its efforts to strengthen staff. One example is the creation of an Assistant Property Manager position which replaced a lower level position when it became vacant. This position was filled with a transfer from the Procurement Department and the resulting Procurement opening was filled with a very qualified external hire. Wherever possible, BSS is using openings to upgrade its personnel so that there is a smooth transition when more senior employees either leave or retire. Other efforts include investment in formal training and cross-training.

Finally, BSS's commitment to continuous improvement is evident in other achievements during the past year. The Information Resources Department (IR) did not renew 36 titles in 2010 which resulted in a cost savings of $115,589. In addition, IR is continuing to pursue open access to various scientific journals that are very expensive. As noted in last year's report, there would be no subscriptions under this system and the various journals would be paid fees up front by the laboratories and universities and, in return, the scientists will have access to the journals at a lower overall cost. This is a global-wide effort that includes CERN, DESY, and other national laboratories. Approximately 75 percent of the needed commitments have been received from the participating organizations. Other IR efforts include 1) purchasing only those books that are recommended by the scientists and 2) participating in the creation of INSPIRE which will replace the old SPIRES data base for physics papers, articles, jobs, people, conferences, etc. Other BSS achievements include:

- Reaching a steady state of e-commerce for procurements;
- Implementing a new Fleet Management system;
- Achieving a 100 percent paper-free travel booking/invoice process;
- Contributing to the new Laboratory WBS; and
- Participating in the Strategic Laboratory Leadership Program.

In summary, BSS has substantially contributed to the Laboratory's overall success during the past year.

Noteworthy Practices

ARRA procurements were successfully awarded at a very high level of performance during a record procurement dollar volume year with no additional staff and no findings from an IG audit or from the Laboratory's Internal Audit staff. BSS approached ARRA and other procurements as a team effort and other organizations praised BSS's responsiveness. The Legal Office also was given credit for its excellent support on new contract requirements, flow-down requirements, terms and conditions, etc.

Recommendations

BSS should continue to pursue system improvements to achieve cost reduction, cost avoidance, and operational efficiencies. This is a repeat recommendation from last year. The Committee recognizes that 1) it has taken time for the new IT organization to get up and running and 2) system improvements often require an up-front investment that may be difficult in a budget-constrained environment. Nevertheless, continued system improvements are critical if BSS is to maintain its current high level of performance.

Findings

There were no findings.

Environment, Safety & Health Section (ES&H)

This report is based on a presentation given to the Visiting Committee by the ES&H Head and interviews with senior staff of the ES&H Section, representatives from the Divisions and other Sections, the chair of the Traffic Safety Subcommittee of the Fermilab ES&H Committee (FESHCOMM), the Fermilab Site Office, and representatives of the Laboratory management.

Observations

For FY 2009, the Laboratory met 100% of the ES&H PEMP goals in the areas of radiation protection, emergency planning, and nuclear materials, but did not meet established goals for TRC and DART rates. With a TRC rate of 1.23 and DART rate of 0.63, compared to goals of <0.65 and <0.25, respectively, injury rates were higher than in FY 2008 but comparable to the two previous years. At the time of this review, the FY 2010 TRC and DART rates are commendably low, they are more in line with FY 2008, and the Laboratory has a good chance of meeting TRC and DART performance goals unless there is a spike in occurrences late in the fiscal year.

The prevailing opinions the Committee heard during its interviews indicate that the new and ongoing initiatives promoted by the ES&H Section are at least partly responsible for the noticeably low injury rates of late. These include the "Take 5 for Goal Zero" program, safety awareness signage at the site entrances, the Section's enhanced web presence and tools, the Porcelain Press postings, the revitalized Traffic Safety Subcommittee of the FESHCOMM, ES&H fairs, and the various safety rewards, recognition, and incentive programs. These initiatives are examples of the ES&H Section's sustained service culture that benefits the Laboratory as a whole.

The Laboratory and the ES&H Section have met FY 2010 milestones related to a number of recent reviews. These include action items contained in the Corrective Action Plan from the March 2009 Accelerator Safety Review. The Laboratory has responded to the Federal Electronics Challenge and the requirements of Executive Order 13423 by reducing the environmental impact of using personal computers. A report is being finalized about the joint Fermilab/FSO review of the Emergency Management Program. The successful renewal of the

Laboratory's ISO 14001 and OHSAS 18001 registrations is mentioned below under Noteworthy Practices.

During the last year, the ES&H Section has collaborated with the Computing Division and the Office of Quality and Best Practices to develop or improve Laboratory-wide online tools. These include frESHTRK, which is an improved system for track and trend analyses and verifying the completion of ES&H issues, the Lessons Learned database, a Continuous Improvements database, and a traffic violations database. The Section has hired a database analyst and the Computing Division has posted an opening for a functional analyst to work with ES&H on IT solutions.

The ES&H Section and ES&H personnel in the line organizations have been heavily engaged in the construction projects funded by the ARRA and, in particular, two employees have supported activities related to the National Environmental Policy Act (NEPA) for ARRA projects. These and other ES&H personnel involved in ARRA projects are cross-trained in several areas, so as the ARRA projects wind down, personnel will be directed to other projects needing attention.

The ES&H Section is thoroughly engaged in the activities of the Office of Quality and Best Practices (OQBP), with representation on the Assurance Council and collaboration on assessments and other projects, examples being the Lessons Learned database and the Root Cause Analysis program. ES&H management systems and processes are defined and being documented.

The Section collaborates with ANL in a number of areas, including ergonomics, life and fire safety, training, radiation issues, and industrial hygiene. ES&H personnel at both laboratories provide support for reviews at each other's facilities. An emergency response memorandum of understanding between ANL and Fermilab has been finalized. The two laboratories have also discussed issues on green house gas emission related to the Sustainability Challenge described below. Future plans include collaboration on radionuclide analysis and NEPA support.

The ES&H Section engages in succession planning and cross training as time and resources allow. Challenges revolve around uncertainties in retirement dates and future Laboratory projects. The limited number of personnel in the Section makes it difficult to overlap key staff to train successors.

The Committee was made aware of the Sustainability Challenge (Executive Order 13514) which is on the horizon. The challenge calls for substantial reductions in green house gas emissions, energy usage and potable water consumption, as well as noticeable increases in renewable energy generation/purchase and sustainable building practices, over the next few years. Senior Laboratory members observed that the green house gas and energy reduction targets will be a great challenge, if not impossible, while running the accelerator complex. A recommendation about the Sustainability Challenge appears below.

Noteworthy Practices

In mid-2010, Fermilab successfully renewed its ISO 14001 (environmental management system) and OHSAS 18001 (occupational health and safety system) registrations. These are the first renewals since the Laboratory obtained these registrations three years ago. The registration audit consisted of interviews, physical observations and reviews of documents and records. The audit team highlighted the frESHTRK system, the Lessons Learned and Continuous Improvements databases, the Take 5 for Goal Zero program, and the Emergency Management Program. The audit found zero non-conformances and four opportunities for improvement which are being implemented. The ISO and OHSAS re-registrations reflect the conscientious attention to workplace safety and environmental management that is promoted by the ES&H Section and extends throughout the Laboratory.

As in previous years, the Visiting Committee noted the deep engagement of each Division and Section in safety awareness and participation in ES&H programming. Tight coordination and communication among the Directorate, the ES&H Section, and ES&H professionals in the line organizations foster a tangible safety culture in which ES&H ownership extends from the highest management levels to individual workers in the field.

Recommendations

The Committee recommends continued attention to the tracking and trending of ES&H indicators. The functional analyst position in the Computing Division should be filled as soon as possible with an individual who can team with the recently hired database analyst in the ES&H Section to move leading indicator analyses forward. The Committee is confident that examining the correlation of injury incidents, near-miss occurrences and first aid cases with a wide range of parameters and behaviors will yield important information that can guide continued commendable ES&H performance at the Laboratory.

In a period like the present with relatively low injury rates, Laboratory staff and users need to avoid the risk of becoming complacent about work safety awareness. The ES&H Section needs to continue the dissemination of its programs and successes with the goal of zero incidents. Safety awareness communications in Fermilab Today, on posters and road signs, in the Porcelain Press, etc., should be renewed frequently to remain fresh and attention getting. The messages should address new areas of potential risk at the Laboratory. As an example, with the roads on site used by vehicles of many types, bicycles, runners, and pedestrians, the Traffic Safety Subcommittee could initiate a creative awareness campaign about road sharing and courtesy. With many programs and initiatives on its plate, the ES&H Section should assess their impact and stress those which appear to improve human performance most effectively. The tracking and trending mentioned above can feed into this process and help identify the good behaviors that have brought the Laboratory where it is today.

Since there is little guidance about the Sustainability Challenge to date, the Laboratory should solicit clarification and expectations from the Department of Energy. While being supportive of the goals of the Challenge, the Laboratory should advocate for a plan that will enable it to maintain the activities central to its scientific mission. The FSO can play an important role in

these discussions. Meanwhile, the Laboratory should explore possible pathways to move in the directions dictated by the Challenge.

Findings

There were no findings.

Facilities Engineering Support Section (FESS)

The Committee interviewed the senior staff of FESS as well as representatives of the Divisions using FESS services and the FSO. It is clear to the Committee that FESS continues to make the most of their limited resources and to provide excellent service to their customers. This last year the addition of ARRA funds and the attendant projects has challenged FESS to maintain their high level of customer service since they did not increase staff to meet the ramp-up in work. They have performed admirably, but cannot keep up this pace without burning out personnel. They are to be commended for their efforts while maintaining an excellent safety record.

Observations

The Committee found that FESS met its FY 2009 performance goals and is on track to meet the FY 2010 goals as well. FESS customers expressed satisfaction with the quality and timeliness of services provided and uniformly appreciated the stress under which the Section has operated this year performing both their traditional mission and the ARRA projects.

The only negative comment was that architects and engineers should be free to the Divisions and not be charged as a cost center. This wishful thinking points up both the cultural differences and the respect between scientists and engineers at Fermilab. The fact that a Director's Employee Recognition Award for ARRA work will be given to FESS staff is a tangible step in bridging the culture gap.

FESS has made inroads in preparing for the Mission Readiness Peer Review to be held in July 2011, but has additional planning to do before the event. Safety issues within FESS typically reside in the bargaining unit and offer opportunities for improvement by working with the bargaining unit to develop greater safety awareness and the benefits of safe behavior to the worker.

FESS typically supplies level two and three project managers but not level ones which often come from the Divisions. In years when there are many small projects dipping into this pool of project management-trained engineers, there may not be sufficient staff with the correct credentials for every effort. Although it has not yet been the case, it could compromise the quality or timeliness of future projects.

FESS often becomes the de facto integrator of projects throughout the site since they make an outreach effort to be involved with project planning with each Division to ensure the provision of correct utilities services, building retrofit design and maintenance, and construction cost estimates. Often they discover that several projects overlap in requirements or geography that is

not evident to the Division owning the project. They, however, have no mandate to address these issues.

Staff have become expert in the lifecycle costs and tradeoffs surrounding building automation and the installation and monitoring of building systems that allow automatic, remote monitoring of sensitive systems rather than manual checks. Many buildings and systems at Fermilab do not have these systems installed due to age, cost of installation or a host of other factors. This causes FESS to require hands-on visual inspection of sensitive systems 24/7, adding to the cost of maintenance.

Finally, maintaining high morale within this organization can be difficult due to constantly moving targets: extending the life of the Tevatron, the addition of sustainability goals, competing projects requesting limited resources or services and, this year, the addition of ARRA efforts. The leadership of FESS is sensitive to this issue and strives constantly to give information and direction to staff concerning the future of Fermilab.

Noteworthy Practices

The migration to a culture of Human Performance Improvement (HPI) and the establishment of an error reporting culture in which workers can report near misses without fear of negative consequences will allow FESS to reach the next level in safety performance. This effort should be encouraged throughout the Laboratory and not just in FESS. Continued support from senior DOE leadership for such a culture is also critical.

Recommendations

The Committee's recommendations are directed partly to FESS and partly to Laboratory management:

FESS – continue to document work in the field in order to improve procedures. This will assist with continuing efforts to improve safety. Move to an error reporting culture with HPI as the standard for the future.

FESS – consider Service Level Agreements (SLAs), particularly in the area of routine maintenance, to establish expectations for both parties in advance. Costing an SLA can assist in budget planning for both FESS and the Division being served.

Laboratory Management – Now may be the time to take a look at the responsibilities and relationship of the Project Management Office and FESS. The Committee did not examine this in detail, but believes that revisiting the way the Laboratory does business every so often may bring new ideas and improvements that will result in cost savings or service improvement in the future and match better the vision for the Laboratory going forward.

Laboratory Management – consider requiring all new projects to include building automation if lifecycle costs can be demonstrated. It is always more expensive to retrofit these systems later, but easy to defer the effort in the interests of project capital cost.

Laboratory Management – consider giving FESS the responsibility to develop and manage a master site plan including buildings and utilities; to play a lead role in the Master Planning Task Force; and to have the responsibility to monitor all planned projects for interferences. This should not be an unfunded mandate.

Findings

There were no findings

Finance Section

This report is based on interviews with senior Laboratory leadership, representatives from Divisions and Sections, and the Chief Financial Officer. The Implementation of Fermilab Time and Labor (FTL) and the additional funding from the American Reinvestment and Recovery Act (ARRA), including the required reporting, presented significant challenges to Finance which successfully responded to these challenges and continues to perform in a responsive, professional manner.

Observations

Finance met expectations in FY 2009 and is on track to meet or exceed the contract performance measures for FY 2010

The reorganization of Information Technology (IT) resulted in some disruption to Finance. Slower IT response times and the availability of IT resources are a concern to Finance. Finance is patient and willing to overlook some temporary frustrations as the new IT organization realigns its workforce and implements new processes for support. Potential loss or deterioration of internal controls was a concern in the transfer of control and oversight of IT from Finance to the new IT organization. However, the IT controls associated with the financial systems have been maintained and appear to be functioning as intended with no decline in control. Since resources for new IT projects are scarce, Finance would like more transparency in how IT resources are allocated and would like to provide input on the allocation of resources.

The implementation of reporting the spending of ARRA funds and the progress of ARRA projects has been a challenge. All ARRA reporting has been submitted accurately and within the desired deadlines even though reporting requirements continue to evolve and at times are not communicated clearly or in a timely manner. Additional oversight of the ARRA spending was added in FY 2010, which includes review by the CFO of all ARRA requisitions to assure that funds are spent appropriately. Though no additional resources have been added to Finance to handle these added ARRA responsibilities, a recent audit of ARRA projects at Fermilab by the DOE Office of the Inspector General resulted in no audit findings.

The implementation of the Contractor Assurance System (CAS) at Fermilab requires involvement from all areas of the Laboratory. OMB Circular A-123, "Management's Responsibility for Internal Controls", requires Finance to document and assess all of its processes, the result of which is an annual Assurance Statement providing the final assessment as

to the reliability of the financial systems and corresponding financial reporting. The Assurance Statement satisfies the CAS requirements for the financial area. An alternate methodology for providing assurance in the financial area other than A-123 might degrade or even negate the reliability of the annual Assurance Statement. The documentation and testing for A-123 can be leveraged to satisfy Quality Assurance requirements also.

Recently, a new FAR Clause was added to all government contracts. This new clause requires reporting detailed vendor information for all procurement awards greater than $25,000 with some additional considerations for the organization's size, percentage of government contracts, etc. Logically, this information would be gathered by Procurement as an order is placed. However, Finance is the organization that formally reports information to the DOE. If Procurement reports this required vendor information, they must assure that the information is consistent with any information reported by Finance.

Finance assisted in the design and implementation of a new work breakdown structure (WBS) for the Laboratory. The new WBS enhances the availability and usefulness of the financial information. The new WBS also provides the capability for improved management reporting and the ability to answer ad hoc requests from management and the DOE in less time.

The implementation of FTL was a significant achievement in FY2010. Kronos was chosen as the vendor and implementation began in January and was completed in June to make the deadline provided in the PEMP. This aggressive deadline required full implementation despite some vendor issues, mainly a "bug" in the back office programs that the vendor has not been able to correct. Finance has identified a method to work around the issues for now, but the work-around is inefficient. Kronos is a hosted service, which introduces a shifting of control in the processing from Finance and the Laboratory's IT organization to Kronos. Kronos does not appear to have a rigid change control mechanism in place for their software, which concerns Finance given this lack of control over processing. Users of FTL would like to see more benefits from what they see as the additional work required for reporting effort in the new system.

The CFO participated in a review of the Budget job family throughout the Laboratory to identify financial tasks and the related skills required for each position. The new Budget job family eliminated disparity among positions with similar financial responsibilities. The CFO has an opportunity to review candidates for Field Financial Manager positions and also should have the ability to provide input to performance evaluations for the employees in these positions.

Noteworthy Practices

There were no noteworthy practices identified in FY 2010.

Recommendations

The first priority for Finance is to complete the implementation of FTL by working with the vendor until the software bug is corrected. After the system stabilizes, reporting should be the next priority, specifically providing reports that allow managers to see where their employees reported their time immediately after the close of a pay period. The information is available but

not readily accessible by users and simple reports would allow users to see the value-added of FTL. Design and implementation of a management dashboard is a priority for IT in the coming year and designing a simple dashboard report that shows the distribution of effort to managers quickly and easily can result in a significant success for IT, Finance and the new dashboard.

Improvements to budgeting across the Laboratory are needed. Scientific representatives commented on their frustration with meeting unrealistic deadlines, which they understand are not always dictated by Finance. Also, some budget forms can be difficult to decipher and complete. Detailed instructions or improved communication of the requirements could alleviate frustrations on both sides. New and/or improved budgeting tools may be required to affect some of these improvements. Also, more analysis by Budget and new reports will be required with the new WBS. Finance should assess the resources available and add resources where necessary to assure these budget concerns are addressed in FY 2011.

There continue to be significant opportunities for increased automation in the travel area. An on-line travel booking tool could save more than 50% per transaction in travel agency fees. Automation of travel authorizations and expense reports with electronic workflow presents many cost saving opportunities. The automation eliminates paper, manual routing, signatures, and filing. Further financial benefits can be realized in the availability of travel data. A fully automated system can provide the data necessary to negotiate preferred rates with airline, hotel or car rental vendors, and can also identify recurring policy exceptions or other areas that have a negative financial impact on the Laboratory.

One simple improvement that can be made quickly with minimal resources is an improvement in invoice certifications. Currently, Accounts Payable routes invoices to contract technical representatives who provide signatures to certify that payment of the invoice is appropriate. This process is extremely manual and time consuming. Traditionally, the vast majority (more than 90%) of invoices are certified without exceptions. Other laboratories have transitioned to scanning invoices and paying those invoices based on a negative certification. In other words, an invoice is scanned and e-mailed to a contract technical representative with a message stating that the invoice will be paid unless the technical representative responds by e-mail to Accounts Payable with an explanation of why the invoice should not be paid. Invoices under a certain dollar threshold (often $100,000) can be paid based on this negative certification, whereas invoices over the dollar threshold or the final invoice on a subcontract may require e-mail confirmation for payment. The method eliminates mailing of the invoices, the loss of invoices, and follow-up for certification for most invoices. Some IT resources may be needed to assist with automated e-mails and additional scanners may be required.

The DOE Standard General Ledger (SGL) was implemented in 2005 and provided a conversion program from the previous reporting format to the new SGL. DOE no longer supports the conversion program, but several laboratories, including Fermilab, continue to use this unsupported conversion program for their monthly financial reporting. Finance should transition from using this old conversion program to a method where they translate the Fermilab general ledger directly to the SGL. This effort will require IT resources but will improve the accuracy and timeliness of the monthly financial reporting.

Though collaborations with ANL have not yet had measurable advantages in the financial area, the regular meetings between the CFO's and COO's have been very beneficial to both sides. Exchanging ideas and best practices allows both laboratories to understand alternatives and best practices in meeting DOE requirements. In FY 2010, there was an exchange of internal auditors in completion of the annual unallowable cost audits at both laboratories.

Findings

There were no findings.

Information Technology

In the 2009 review of Fermilab Administration and Operations Support, the Computing Division (CD) began to be evaluated as a provider of services to a number of customers. This is due to the Laboratory's recent steps to consolidate Information Technology (IT) services into the CD. This 2010 review is the first review in which the Chief Information Officer (CIO) is named as the permanent CIO (was interim last year), also serving as the head of the CD.

The Committee heard a report from the CIO which principally addressed the consolidation of IT services and the CD's changing role as a provider of IT services to customers as well as accomplishments during the past year. Performance measures for IT services and SLAs are still in development. The presentations from the service sections of the Laboratory (BSS, FESS, etc.) covered their reactions to and concerns about the IT restructuring, and this topic was addressed in interviews with representatives from the other Divisions. In addition, the Committee interviewed senior staff members in the CD and managers who are particularly involved in IT services at the Laboratory.

At the time of this year's review, the reorganization of IT services was complete, and most new hires were in place, but all new roles and services were not yet in complete operation. A key example is that the new lead of user services is still in transition into that role. The CD is partitioned into four quadrants entitled Future Programs and Experiments, Scientific Programs, Scientific Computing Facilities, and Lab and Scientific Core Services; the reorganization primarily affected the latter quadrant and this review is limited to that quadrant's operations and support of information technology for the Laboratory.

Perhaps most significantly, before the consolidation to date (in 2008), a total of approximately 36 FTEs throughout the Laboratory worked in help desk and desktop support (including contractors and those formerly in the Management Information Services group and other groups formerly outside of the CD , but excluding the Accelerator Division, which manages IT relatively independently). Now, with the consolidation essentially complete, including buyouts, one leaving on disability, some re-assignments from IT (not moving to CD), there are approximately 30 FTEs (plus Accelerator Division) in help desk and desktop support. The Tune IT up campaign did an inventory of desktops and laptops used as personal devices (omitting all the scientific cpu and instruments on the network) and found approximately 2592 Windows systems, 536 Macs and 572 Linux systems (perhaps a total of 500 in the Accelerator Division). This number and variety of systems puts the number of support personnel FTEs toward the lower end of the

spectrum (many machines supported per FTE) as compared to educational institutions, but the Committee is not aware of a specific benchmark for DOE laboratories in this regard.

Observations

The Committee observed that a consolidated and coherent IT organization has been assembled with the transition and is generally functioning. Its roles and responsibilities and those of users appear generally well understood throughout the Laboratory and by the leadership and managers of IT. It also appears well understood throughout the Laboratory that the IT organization is early in its maturity and is being given the patience it needs to continue to develop its detailed policies and practices, to set expectations and/or negotiate service level agreements with all areas, and bring its services to best practice standards.

The Fermilab Time and Labor (FTL) Kronos installation, completed with intense effort of CD and Finance Division this year, is a DOE Notable Outcome and demonstrated success in the new IT organization serving the Finance Division (former home of a substantial number of current CD IT professionals). Active work remains with Finance and the vendor to stabilize all functions and gain secondary use of the data in Kronos. The prioritized diversion of IT personnel to Kronos is winding down. With ES&H, frESHTRK and other databases have been established with what appears to be a solid working relationship with the CD.

However, some other areas of the laboratory have had less attention from the CD since the transition as noted in other parts of this report. In particular users in multiple Sections and Divisions have reported that basic IT services are unacceptably slow or missing. Fixing of broken desktops is taking multiple days. Ordering and configuring standard machines is slower than expectations of users. In addition there remains insufficient engagement with users. Users are confused regarding how to direct the desktop support/help desk in prioritization of requests. Basic service level agreements are not yet established or are unusable in most areas. Users desire higher visibility and understanding of consolidated IT performance metrics and engagement in prioritization and governance. In addition, some projects are on hold due to resource constraints. Together, perceived inefficiency, limited metrics and unclear governance can be a frustrating combination for users. There was a recommendation last year from the Committee to "establish an internal IT Management Steering Committee" which has not yet been formed. Below, we further specify this recommendation and note its timeliness this year.

From the viewpoint of the IT senior leaders themselves, consolidation of capabilities are having some specific, important desired effects, such as more completely and easily controlled cyber-security and other standardization leading to some improved efficiencies. Remaining challenges are recognized including that multiple methods of doing some tasks is still creating compromises and some practices are still being documented. Further standardization is ongoing and managers are remarkably positive and working well together as a team after being consolidated from multiple areas often into new job roles.

Noteworthy Practices

The Committee notes that best practices and knowledge from MIS department personnel, particularly in regard to financial systems, have been successfully integrated into the central IT organization. This is both a cultural and functional success.

Recommendations

The Committee recommends that immediate attention be given by the CD and Management to improving basic IT services. It is well understood throughout the Laboratory that some decreased service performance would occur in this first year of consolidation, but that has now passed. Addressing this may require attention to IT metrics, staffing levels, user education, establishing expectations and user agreements and other activities. Fortunately, the newly placed lead for user services is prepared to take on these issues now. Persistent problems in this area would raise the level of significance to a "Finding" for the Laboratory next year given that the organizational transition is complete, but recognizing that all policies and practice transitions are not yet complete.

The Committee recommends that user engagement in IT operations be expanded with two levels of steering activities. Given resource constraints, strategic long-term, project-based prioritization of IT resources is needed. A council for strategic decision-making should be established (e.g. will iProcurement be deployed? When?). In addition, a regular, frequent open forum should be established to enable representation from all Sections and Divisions (and open to Departments to improve user engagement in day-to-day IT operations).

The Committee recommends that coherent, simple, performance measures (metrics) of IT services and regular reporting to users be established (e.g. Service Desk metrics provided to each Section/Division in regard to IT performance for that area). In addition, the committee recommends more regular communication of the status of IT improvements and enhanced services. These reporting activities will build understanding in users of IT performance and gain trust and further engagement.

Finally, the Committee recommends that more fine-grained development of IT services be advanced in concert with users. In-depth needs assessments should be established and maintained with all Sections, Divisions, and some Departments with special needs. Then, SLAs (formal or informal) should be established and maintained. Some areas will benefit from standard agreements and gain economies for the Laboratory, whereas other areas will simply need common understanding between the area and the CD of what systems will be managed locally (i.e. why and how, according to what policies?). Some will need only systems support on local IT systems with the area providing application, content, and user support (e.g. Websites/servers and Macintosh desktops currently self-managed in the Education Office).

Findings

There were no findings.

Office of Quality and Best Practices (OQBP)

The Committee received presentations on the activities of the Office of Quality and Best Practices (OQBP) and the implementation of Integrated Quality Assurance by the Business Services Section (BSS), Environment, Safety and Health (ES&H), Workforce Development and Resources Section (WDRS), Finance (FI), Facilities and Engineering Support Section (FESS), and Computing Division (CD). The Committee also interviewed the Fermilab Deputy Director, OQBP Section Head, the BSS Section Head, the FESS Section Head, BSS Quality Assurance Representative, FESS Quality Assurance Representative, three members of the URS team supporting the OQBP, and the Acting Head of Particle Physics. The presentations and interviews were augmented by reviews of multiple documents including the Integrated Quality Assurance Program, the Assessments Manual, the Management Assessments Procedure, the Corrective and Preventative Action Procedure, the Lessons Learned Program, the As-Is Assessment of Scientific Research, the Fermilab Strategic Plan, the As-Is Assessment for BSS, and examples of corrective actions.

Observations

The Committee has developed four high level observations related to the Laboratory's efforts in Quality and Best Practices.

First, progress in implementation of Quality Assurance is evident across the Laboratory. The Laboratory is to be commended for their efforts. Management is engaged, individually as leaders of their organizations and collectively as an Assurance Council. The overall program, as defined by the Integrated Quality Assurance Program, is supported by implementing procedures and guidance documents such as the Assessments Manual, the Management Assessments Procedure, the Corrective and Preventative Action Procedure, the Lessons Learned Program, and the Quality Assurance Guidelines for Scientific Research. Quality Assurance Representatives and Quality Assurance Engineers are in place for Laboratory Sections and Divisions. The Laboratory has completed design of a major management system and key process hierarchy, performed As-Is Baselines for samples of the processes, and developed corrective action plans for the processes as indicated by the baselines. Additionally, for FY 2010 the Laboratory selected six areas for quality assurance assessments and has completed most of them at the time of the Committee review. Finally, corrective actions are being managed and tracked through a process and database operated by the OQBP.

Second, the Integrated Quality Assurance Program is not yet providing optimal value to the Laboratory. Most of the implementing procedures are relatively new and have not yet been through cycles of improvement to ensure effectiveness. For example, the Lessons Learned Program may not adequately consider key sources of information external to the DOE as required by DOE O210.2, may be missing opportunities to leverage FRA partners and ANL, and may not be well positioned for the pending update to DOE O210.2 which will expand the scope to include all site activities rather than just safety. Additionally, there are opportunities to improve efficiency. For example, multiple quality assurance assessments are identifying weaknesses in document management, an area that has been identified as needing improvement in the past and one which might be most efficiently addressed with a single Laboratory-wide corrective action. Similarly, quality assurance approaches for assessment and corrective actions

are not well integrated with other methods for these activities at the Laboratory. Finally, quality assurance is being applied broadly through the organizational and process structure, but it is not yet clear that it is efficiently and effectively applying assurance resources to the most significant risks to mission delivery at the Laboratory.

Third, the approach to Quality Improvement described in the Integrated Quality Assurance Program may not be sufficiently systematic to yield the desired results. For example, how the Strategic Plan, the Performance Evaluation and Measurement Plan, management reviews, the implementing procedures for the IQA, and the problem solving methods listed in the Quality Improvement section of the IQA work together to reliably lead to quality improvement is not clear. This may be contributing to the fact that presentations of improvement results to the Committee by the section heads were mostly anecdotal and qualitative in nature.

Fourth, interviews with managers indicate that the Laboratory has not yet developed a clear understanding of what a Contractor Assurance System (CAS) is, how it will be developed, and the expected benefits of such a system. The relationship of a CAS to parent oversight, Quality Assurance, ES&H and other processes and activities is not yet defined.

Noteworthy Practices

The Committee found two quality assurance practices to be noteworthy. First, the Laboratory executed a Scientific As-Is Assessment evaluating the implementation of its Quality Assurance Guidelines for Scientific Research against its IQA Program and several research programs. This activity is a clear statement of the commitment of the Laboratory to Quality Assurance in its core mission. Second, the Laboratory developed a major system and key process hierarchy to use in deploying its IQA. In combination, these activities should enable the Laboratory to avoid rework that other sites have experienced when they did not perform them until later in quality assurance implementation.

Recommendations

The Committee has four recommendations for the Laboratory to consider:

First, to maximize value, the Laboratory should identify its primary risks to mission achievement and ensure that the IQA program is applied first to the relevant processes and activities. One way these risks can be identified is by asking “Where is it critical that we get it right the first time?” and “What can we absolutely not afford to have happen?”

Second, to improve the effectiveness of its Quality Improvement approach, the Laboratory should make its strategic plan more actionable and accessible. This could be accomplished by augmenting the plan with clear objectives with measurable goals that are deployed through actions with assigned owners and timeframes. Additionally, if the plan is written in a format and language that the workforce can understand, then it can be used to efficiently align improvement and risk management activities across the Laboratory through the prioritization of assessments, issues, corrective action plans, resource allocations, and other improvement actions.

Third, use the Contractor Assurance System (H-13 Clause) implementation as an opportunity to increase efficiency and integration across Laboratory systems. For example, CAS implementation could be used to integrate assessment selection, scheduling, and execution approaches as well as issue and corrective action management methods. As part of CAS implementation, the Laboratory could leverage its major system and key process hierarchy to develop and implement the measures and performance targets required for a CAS. Finally, the Laboratory could perform selected benchmarks with other DOE sites as part of its CAS implementation. For example, benchmarking the Laboratory's Lessons Learned Program may provide insight as to how other sites have addressed lessons learned in an integrated manner and how they plan to adapt to pending changes in DOE O210.2.

Fourth, quickly set up a Sharepoint server, design a simple document hierarchy, and establish a simple document management process. Continuing to identify and accumulate document management corrective actions at the organization and process level is not the most efficient use of assessment and corrective action management resources.

Findings

There were no findings.

Workforce Development and Resources Section (WDRS)

The information in this report was obtained through interviews with Fermilab senior leadership, representatives from Divisions, Sections and WDRS staff, as well as from briefings and other materials provided by WDRS. WDRS continues to effectively support the overall Laboratory mission and to improve performance and pursue cost containment in its operations.

Observations

The performance of WDRS is fundamentally sound. The Laboratory senior leadership and the representatives from the Divisions and Sections stated WDRS is performing well in general and is responsive to the needs of the organization at all levels. Two critical indicators of WDRS success are the performance of the Laboratory in assuring its employment practices are competitive in the marketplace and its ability to recruit and retain needed employees. Current benchmarking of Laboratory employee pay and benefits indicates they are competitive for all employee groups, compared to the practices in the selected market. In addition, the Laboratory's ability to recruit desired employees of all types and to retain them as long as needed to accomplish the mission is solid. Maintenance and appropriate revision of processes to implement effective human resources practices also continue, e.g., proposed changes to the executive/management pay structure, review of engineering and science job families, and inclusion of HR processes in scientific recruitment.

In addition to the critical indicators mentioned above, WDRS uses internal measures and is expanding them to facilitate effective management and continuous improvement of the Section. These activities are integrated with the efforts of the Laboratory's Office of Quality and Best Practices and should provide a useful platform for WDRS efforts to support development of a Contractor Assurance System for the Laboratory. WDRS met all contract obligations under the

PEMP process for FY 2009 and is on track for successful performance in FY 2010 including two notable outcomes.

One area of concern expressed by the Laboratory senior leadership is the internal arrangement for the management of employee benefits. To address this concern, the Laboratory is working with a consultant who will evaluate the current organization and practices and make recommendations for revisions as appropriate. Another area of concern expressed during the interviews with WDRS staff was information technology support for the Education Office. This issue is addressed in the Information Technology portion of this report.

Noteworthy Practices

WDRS has made significant improvement in support to the Laboratory and in meeting needs highlighted by employees during focus group meetings in 2008. The focus groups suggested the need for increased communication and relationship building between WDRS and employees. Many activities are underway to improve this communication including, "Ask HR", "Tell HR", a redesigned WDRS website, an employee advisory group, regular publication of a benefits bulletin and increased frequency of meetings between WDRS staff and employees/managers in supported organizations.

Succession planning for the six top Laboratory jobs has been completed with identification of internal candidates/development plans and external candidates/attraction strategies. There are plans to expand this effort in the coming year to include the next tier of Fermilab's top jobs.

Another notable WDRS contribution to Laboratory-wide efforts is the development of a curriculum committee to improve management development at the Laboratory.

Recommendations

To strengthen cooperation with ANL and to determine the potential for cost savings, the Committee recommends that WDRS investigate opportunities for coordinating administration of medical/dental benefits with ANL. This should specifically evaluate the potential impact on cost of pooling the employee/retiree groups from both laboratories to leverage the purchasing power of the larger group in the healthcare marketplace. If initial investigation indicates potential cost benefits with acceptable impact on employees, aspects of proceeding beyond the WDRS scope (e.g., contract provisions, cost sharing and other agreements between the laboratories) should be evaluated. Also it is recommended that WDRS participate with ANL on use of a consultant to assess the expected impact of healthcare reform legislation on each laboratory.

Fermilab should also consider additional opportunities to increase communications with the bargaining units regarding safety and efficiency. Current activities in this regard have yielded positive outcomes and expansion may further enhance implementation of the bargaining agreements and future interaction among the parties affected by the agreements.

The Committee also suggests that recent changes to WDRS processes be evaluated at an appropriate time to determine their effectiveness. One example is the change to the hiring process for Laboratory scientists. Along these lines, the changes resulting from the 2008 focus

groups should be reviewed to ensure they are complete and effective. In this regard, Laboratory management should assess the focus group findings and resulting changes to determine if there are additional actions needed which are beyond the authority of WDRS to implement.

The Committee recommends that Laboratory management continue and expand efforts for greater use of WDRS as a valued participant in management decisions and their execution. Activities in which WDRS may provide added value include strategic planning, workforce planning, management of individual and group performance, evaluation and training of Laboratory managers, facilitating culture change, employee morale, and cost control.

In view of the recent incident, the Committee recommends that WDRS review processes to identify and support employees/users at risk. This should include processes for dissemination of critical or time sensitive information as well as information which is less time sensitive but of high importance for maintaining safety, health, or morale of employees/users. In addition, the Committee recommends that other appropriate Laboratory organizations review processes in place to safeguard the workforce and to protect the organization from the effects of low probability actions by individuals or groups.

Findings

There were no findings for WDRS.

Answers to Questions from the Charge

1. How did your functional area fare last year versus established performance measures? What steps are being taken to address deficiencies or to sustain outstanding performance? What is your assessment of your progress to date against the FY10 performance measures and your projection of outcomes for the year against these measures?

   These were answered in the separate presentations by the Sections and contain no global observations other than Sections appear to be meeting goals successfully.

2. What specific achievements has your unit made in developing and sustaining a service culture? Specifically:

   a. Has the reorganization and consolidation of IT support services had the desired effect?

   IT was the challenge this year and the integration efforts were generally unsuccessful in maintaining the level of service for desktop operations and help desk responses. IT has made efforts to address the problems but results have not yet been demonstrated.

   b. Has our ability to track and trend, especially in the ES&H area, improved?

   During FY 2010, the ES&H Section collaborated with the Computing Division and the Office of Quality and Best Practices to develop and improve a number of

tools for track and trend analyses of TRC and DART cases, first aid cases, near-miss incidents, and associated human behaviors. The tools include the frESHTRK system, the Continuous Improvements database, the Lessons Learned database, the Root Cause Analysis program, and a traffic violations database. The analyses will benefit from a recently hired database analyst in the ES&H Section and a functional analyst to be hired in the near future by the Computing Division. A recommendation in the ES&H Section of this report encourages the Laboratory to monitor progress on formal track and trend analyses using these tools and human resources, and disseminate results and lessons learned to a Laboratory-wide audience in a timely way.

c. Do the compensation, employee relations and employment functions enable and support excellence in science?

WDRS has made great strides in moving out into the Divisions to offer personal service and address employee questions in real time. This effort has been much appreciated by the Divisions. While the increased interaction does not guarantee improvements in mission support, it does provide the foundation for collaboration on future human resources support improvements and for fine tuning existing processes, e.g., incorporation of HR processes in hiring scientific staff.

d. Are benefits planning and administration meeting employees' needs?

Same as above, regarding improved interaction between WDRS and employees. In addition, Lab managers expressed concerns about this area and are actively working on changes with the help of a consultant.

e. Has the performance of organizations involved in utilizing the ARRA funding been up to the task?

ARRA performance by all Sections has been successful with special kudos to BSS for their procurement operations and FESS for their construction support.

f. What improvements would you like to see?

Any suggestions are addressed in individual section reports.

3. As the activities funded by the ARRA wind down, is Fermilab, including its subcontractors, facing, either directly or indirectly, a situation where the workforce funded by the ARRA will be facing significant layoffs? If so, what is the plan to deal with the situation and what are our expectations for its success?

   No sections reported hiring for ARRA activities so there does not appear to be an issue for layoffs from the winding down of ARRA activities within the Laboratory. This may not be the case with subcontractors, particularly those involved in construction activities.

At this point there is little that Fermilab can do to alleviate this problem without an influx of new money.

4. How is your unit integrating the efforts of Office of Quality and Best Practices (OQBP)? What contact has your area had with the OQBP? What do you plan for the future? How is your unit implementing appropriate aspects of the Quality and Best Practices plan? How does this support the requirement for a Contractor Assurance System?

   OQBP has spent this year developing and implementing the quality program for the Laboratory. Although the Laboratory did perform baseline program assessments and six quality assurance assessments, it was not clear to the Committee that: the new Quality Plan was well integrated throughout the Laboratory; QA practices and assessments focused on the greatest risks to successful delivery of the Fermilab mission; and there is a solid understanding of how quality assurance practices support a Contractor Assurance System.

5. What interaction did your unit have with counterpart operations staff at Argonne National Laboratory? What are your future plans for interaction, and what are your specific goals?

   Interactions with ANL are inconsistent across the Laboratory. Most, but not all sections have no specific plan or goal for interactions in the future.

6. Last year our Days Away Restricted Transferred and Total Recordable Case rates were high; this year the same rates have been remarkably low. Which year, if any, reflects the true state of our safety program and why?

   Safety has become a way of life at Fermilab. With so few safety incidents, statistical variability can make understanding performance difficult. That said, there is always room for improvement.

7. How are you addressing succession planning for your unit?

   Several sections had addressed succession planning, but what impressed the Committee most was the effort undertaken by WDRS to do succession planning for Laboratory Management.

Conclusions

Fermilab remains one of the best run laboratories in the Department of Energy and is a credit to the management and staff who are dedicated to its success. This year has offered challenges (i.e. ARRA funding and IT reorganization) that in one case was met with herculean effort and resultant success and another that fell short of the mark. The Committee has made several overarching Observations and Recommendations:

1. The Laboratory is in transition from a large single project future (ILC) to a future that involves many different initiatives. The sooner Laboratory Management can develop a clear, crisp vision that incorporates Administrative & Operations Support areas and is

expressed in language that is immediately understandable by both the Laboratory and the local community, the better all parts of the Laboratory can come together to execute that vision.

2. The Laboratory has done a wonderful job of institutionalizing safety. That has been clear to the Committee in many areas. Now is the time to personalize safety and make it a part of every employee's life outside as well as inside the Laboratory. That will pay dividends in keeping safety alive in the workplace. We also caution that it is easy to take something for granted that you have mastered, therefore, we urge the Laboratory to keep safety fresh in the minds of staff and continue to develop programs that are new and catch the eye.

3. Interactions with ANL are inconsistent across the Laboratory. The Committee sees value in the collaborations even if they do not result in a quantifiable cost saving. We encourage all sections to continue to seek opportunities to get together with ANL to discuss issues and solutions. We believe many good ideas spring from this interaction that participants are not even aware of.

4. The Sustainability Challenge appears to be virtually impossible to achieve on an individual laboratory basis. In order for both DOE and Fermilab to meet the challenge, the best solution may be to measure the reductions across all DOE laboratories. That will take advantage of the type of reduction possible at each laboratory without penalizing unduly those whose mission does not permit drastic action. To the extent that FRA and Laboratory Management can champion this position with DOE, the Committee encourages them to do so.

5. The parent oversight elements of the new H clause mandating a Contractor Assurance System can be addressed using the basic structure of this review committee supplemented by additional members of the Fermilab Board and preceded by a self-assessment by the Laboratory. Laboratory Management and FRA need to design the system immediately so it will be ready for an internal FRA review before the planned DOE review in spring 2011.

6. There were no findings this year, but if the issues surrounding IT and support for desktop and help desk services persist, Fermilab staff will not be so understanding in the next review nor will the Committee.